

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A document processing apparatus comprising:

a determination unit that determines at least some of a plurality of colors of an area contained in input document data as a determined color ~~group~~group, wherein the determination unit determines whether the area has a predetermined reference area or larger based on a histogram of the colors;

a retrieval unit that determines an association between the colors in the determined color group based on one or more criteria, determines a set of the colors contained in the determined color group as a confusion color set based on the association and confusion color information defined in connection with color blindness of a human being in a predetermined color component space; and

a processor that performs a predetermined process for portions of the colors contained in the confusion color set determined by the retrieval unit in the input document data.

2. (Previously Presented) The document processing apparatus according to claim 1, wherein the retrieval unit determines some of the plurality of colors as the confusion color set when some of the plurality of colors in the determined color group are contained in a predetermined range defined in the proximity of one attention confusion color locus in a confusion color locus group defined so as to contain confusion colors in color blindness in the color component space.

3. (Previously Presented) The document processing apparatus according to claim 1, wherein the retrieval unit defines a nearby confusion area provided based on color vision characteristics of a human being or characteristics of an output medium in the

predetermined color component space for each of the colors in the determined color group; and the retrieval unit determines the plurality of colors contained in the nearby confusion area as the confusion color set when one attention confusion color locus in a confusion color locus group defined so as to contain confusion colors in color blindness in the color component space passes through an inside of the defined nearby confusion area.

4. (Previously Presented) The document processing apparatus according to claim 1, wherein the retrieval unit defines a nearby confusion area provided based on color vision characteristics of a human being or characteristics of an output medium in the predetermined color component space for each of the colors in the determined color group; and the retrieval unit determines a plurality of colors contained in the nearby confusion area and colors in a predetermined area in a proximity of an attention confusion color locus as the confusion color set when one attention confusion color locus in a confusion color locus group defined so as to contain confusion colors in color blindness in the color component space passes through an inside of the defined nearby confusion area.

5. (Previously Presented) The document processing apparatus according to claim 1, wherein the retrieval unit determines which blocks previously defined in the predetermined color component space for each of the colors in the determined color group belongs to; and the retrieval unit determines the confusion color set of the colors contained in the determined color group based on block-to-block confusion color information associating blocks confused with each other in color blindness in connection with color blindness of a human being and information of a block to which each of the colors contained in the determined color group belongs.

6. (Previously Presented) The document processing apparatus according to claim 1, wherein the predetermined color component space contains a lightness component of each of the colors in the determined color group; and the retrieval unit removes an attention

color from the confusion color set when the attention color contained in the confusion color set and other one or more colors contained in the confusion color set differ in lightness on color vision characteristics of a human being.

7. (Previously Presented) The document processing apparatus according to claim 1, wherein the predetermined color component space contains a lightness component of each of the colors in the determined color group; and the retrieval unit does not determine whether or not colors of the confusion color set differ in lightness on color vision characteristics of a human being are confused with each other.

8. (Currently Amended) A document processing method using a computer to process color contained in a document, comprising:

determining at least some of a plurality of colors of an area contained in input document data as a determined color group;

determining whether the area has a predetermined reference area or larger based on a histogram of the colors;

_____determining an association between the colors in the determined color group based on one or more criteria;

determining a set of the colors in the determined color group as a confusion color set based on the association and confusion color information defined in connection with color blindness of a human being in a predetermined color component space; and

performing a predetermined process for portions of colors in the confusion color set in the input document data.